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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/636,167	08/07/2003	Silvio Lupo	36020364 US02	3595
57299	7590	01/25/2008	EXAMINER	
Kathy Manke Avago Technologies Limited 4380 Ziegler Road Fort Collins, CO 80525			NGUYEN, PHILLIP	
			ART UNIT	PAPER NUMBER
			2828	
			NOTIFICATION DATE	DELIVERY MODE
			01/25/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

avagoip@system.foundationip.com  
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## Office Action Summary

**Application No.**

10/636,167

**Applicant(s)**

LUPO, SILVIO

**Examiner**

Phillip Nguyen

**Art Unit**

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 is/are allowed.
- 6) ☐ Claim(s) 1 and 3-7 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see Amendment after Final, filed 11/30/2007, with respect to the rejection(s) of claim(s) 1, 3-8 under 102(b) rejection have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Auracher et al. (US 6567439) and Chen (US 6384442).

The objection of claim 2 is hereby withdrawn because of the ground of rejection is changed.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-5, 7, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auracher et al. (US 6567439) in view of Chen (US 6384442).

With respect to claim 1, Auracher discloses a mounting arrangement for a laser source and a bias inductance, said laser source and said bias inductance being mounted on a general plane of extension of a submount (col. 7, lines 20-23). However, Auracher does not explicitly

disclose the bias inductance is mounted on said submount so that a longest dimension of said bias inductance is substantially orthogonal to said general plane of said submount.

Chen discloses an inductance mounted on a submount 10 wherein the inductance is mounted on said submount so that a longest dimension of said bias inductance is substantially orthogonal to said general plane of said submount (Fig. 5).

It would have been obvious to the one having ordinary skill in the art at the time the invention was made to provide the bias inductance as taught by Chen to Auracher in order to minimize the surface space that is taken up by the inductor on the surface of the submount (col. 10, lines 3-8).

With respect to claim 3, it would have been obvious to the one having ordinary skill in the art at the time the invention was made to provide the bias inductance displaced laterally with respect to said lasing direction of the laser source in order to prevent blocking the laser light.

With respect to claim 5, Auracher discloses the laser and other auxiliary components being mounted on the submount in Fig. 10 by conductive glue (col. 8, lines 7-13).

With respect to claim 7, Auracher discloses in Fig. 5b a laser mounting apparatus including a laser source 111 and a conductive pad 117 on which the laser is mounted. Even though this Figure 7 does not show the bias inductance, it would have been obvious to the one having ordinary skill in the art at the time the invention was made to provide this conductive pad on which the laser and the bias inductance are mounted in order to reduce the inductance generated from the bonding wire if used. It is also well known in the art for using such conductive pad.

With respect to claims 4 and 10, Auracher discloses the laser source includes front and back facets (col. 4, lines 5-7) which is believed to be likely the same type of laser used in other embodiments in the invention. Neither Auracher nor Chen explicitly discloses the bias inductance/auxiliary component has a surface exposed to radiation from said back facet of the laser source and in that said surface is tilted laterally with respect to said lasing direction so that radiation from said laser back facet along said lasing direction is reflected away from such direction. It would have been obvious to the one having ordinary skill in the art at the time the invention was made to provide an auxiliary component/bias inductance that does not reflect light to the laser in order to avoid interference with the signal of the laser.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Auracher et al. (US 6567439) in view of Chen (US 6384442) and further in view of Auracher et al. (US 20020085256). Auracher ('439) and Chen disclose the claimed invention except for the bias inductance being in the form of SMD component. Auracher ('256) discloses a mounting arrangement with a laser source LD, a submount 6, and an auxiliary component such as L disposed on the general plane of the submount, and the auxiliary component is SMD component. For the advantageous benefit of the arrangement, it would have been obvious to the one having ordinary skill in the art at the time the invention was made to provide the auxiliary component as SMD component in order to fit directly into the submount as taught by Auracher ('256) to Auracher ('439) and Chen.

*Allowable Subject Matter*

4. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 9 is allowed.

There is not taught the claimed invention with the submount having an outer surface and a recess with respect to the outer surface, wherein at least part of said laser driver is arranged in said recess so that the driver has an end surface extending from the recess substantially flush with said conductive pad for mounting said laser source.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Communication Information***

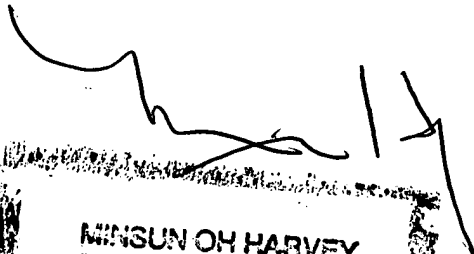
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Nguyen whose telephone number is 571-272-1947. The examiner can normally be reached on 9:00 AM - 6:00 PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MINSUN HARVEY, can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Phillip Nguyen/

AU 2828

  
**MINSUN OH HARVEY  
PRIMARY EXAMINER**